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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/936,953	09/17/2001	Junzo Sunamoto	Yanagihara Case 62	4435
7590 Flynn Thiel Boutell & Tanis 2026 Rambling Road Kalamazoo, MI 49008-1699			EXAMINER CHONG, YONG SOO	
			ART UNIT 1617	PAPER NUMBER
			MAIL DATE 05/13/2009	DELIVERY MODE PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary**Application No.**

09/936,953

Applicant(s)

SUNAMOTO ET AL.

Examiner

YONG S. CHONG

Art Unit

1617

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 13 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1, 4, 5 and 8-12 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 4-5, 8-12 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/02)
- Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
- Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Status of the Application

A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 12/13/06 has been entered.

Claim(s) 2-3, 6-7 have been cancelled. Claim(s) 1, 4-5, 8-12 are pending and examined herein.

Applicant's arguments have been fully considered but found not persuasive. The rejection(s) of the last Office Action are maintained for reasons of record and repeated below for Applicant's convenience.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham vs John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 4-5, and 8-12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sunamoto et al. (English Translation of JP 03-292301) in view of Ishiwatari et al. (US Patent No. 6,074,652).

Sunamoto et al. disclose polysaccharide-sterol derivatives. Exemplified is an emulsion comprising 10 mg oil (glycerol tricaprilate, a cosmetic component), 5 mg pullulan-cholesterol derivative, and 1 mL water (a cosmetic component), a percent weight of 0.5% pullulan cholesterol derivative and 95.5% cosmetic components (oil and water), see page 14. For the pullulan-cholesterol derivative having the structure of formula (1) of the instant claims, see page 2, claim 1. For 0.1 - 6 units per 100 monosaccharide units, see page 2, claim 1.

It is respectfully pointed out that a recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. In a claim drawn to a process of making, the intended use must result in a manipulative difference as compared to the prior art. See *In re Casey*, 152 USPQ 235 (CCPA 1967)

and *In re Otto*, 136 USPQ 458, 459 (CCPA 1963). Thus, the intended uses of claims 8 and 9 are not afforded patentable weight.

It is further respectfully pointed out that the recitation "cosmetic" has not been given patentable weight because the recitation occurs in the preamble. A preamble is generally not accorded any patentable weight where it merely recites the purpose of a process or the intended use of a structure, and where the body of the claim does not depend on the preamble for completeness but, instead, the process steps or structural limitations are able to stand alone. See *In re Hirao*, 535 F.2d 67, 190 USPQ 15 (CCPA 1976) and *Kropa v. Robie*, 187 F.2d 150, 152, 88 USPQ 478, 481 (CCPA 1951).

Sunamoto et al. does not teach a solvent containing at least one of a volatile oil and a volatile solvent or wherein said cosmetic components additionally comprise at least one member selected from moisture-preserving agents, UV absorbers, beauty whitening agents, inorganic pigments etc... or wherein the solvent comprises a volatile hydrocarbon oil having a boiling point at normal pressure in the range from 60-160 °C.

Ishiwatari et al. teach, in col. 1 line 40 to col. 2 line 45, an oil-in-water emulsified composition which has good usability and stability comprising an α -monoalkyl glyceryl ether, a wax, and a silicone oil, and can contain a higher alcohol, a water-soluble high polymer, an humectant, and a UV-protecting agent and film forming agent.

Ishiwatari et al. teach, in col. 5 lines 5-10, the preferred silicone oils can be volatile or non-volatile, straight chain or cyclic, and with specific embodiments being dimethylpolysiloxane, decamethylcyclopentasiloxane, and methylphenylpolysiloxane.

Ishiwatari et al. teach, in col. 10 lines 55-67, that the oil-in-water emulsified

composition can be stabilized by addition of water-soluble high polymers such as polysaccharides.

Ishiwatari et al. teach, in col. 11 lines 15-35, that the oil-in-water emulsified compositions are to be used in the formulation of cosmetic products. In example 1-1 a cosmetic cream formulation is presented comprising a water phase and an oil phase. In the oil phase octamethylcyclotetrasiloxane (30% by weight) and dimethylpolysiloxane (3% by weight) are present. The examiner notes that both of these siloxanes meet the applicant's examples of a volatile solvent and a volatile oil having a boiling point between 60-160 °C. Additionally the water phase contain the humectants malitol and glycerin (moisture-preserving agents).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use the pullulan-sterol compositions of Sunamoto et al. in the cosmetic water-in-oil emulsions of Ishiwatari et al. as pullulan-sterol compositions had previously been used in the formulation of emulsions (and liposomes) and that the pullulan-sterol emulsions exhibited improved chemical and physical stabilities. One would have been motivated to use the pullulan-sterol compounds in the Ishiwatari et al cosmetic emulsions in order to take advantage of the improved chemical and physical stability exhibited by the pullulan-sterol compounds.

Response to Arguments

The Hayashi Declaration under 37 CFR 1.132 filed 3/27/07 is insufficient to overcome the rejection of claims 1, 4-5, and 8-12 based upon Sunamoto et al. (English Translation of JP 03-292301) in view of Ishiwatari et al. (US Patent No. 6,074,652).

Applicant has claimed unexpected results in the form of improved elasticity of human skin, however Applicant has not clearly explained why this is unexpected. The claimed composition is a cosmetic, also taught by the cited prior art, therefore one of ordinary skill in the art would expect improved elasticity among other cosmetic properties to be conferred to the skin.

Further, the results are not commensurate with the scope of the claims. Currently, independent claim 1 recites broad ranges for the amount of its components. Specifically, cosmetic components from 50-99.999 wt%, any amount of a volatile oil and volatile organic solvent, and from 0.001-50 wt% of a pullulan-cholesterol derivative. Moreover, this derivative can contain in a proportion of 0.01 to 20 groups per 100 monosaccharide units represented by the formula I. The permutations are enormous, however the Hayashi Declaration shows only 4 data points with all variable being constant with the exception of the number of cholesteryl groups being introduced into the pullulan skeleton.

Furthermore, there is no comparison with the closest prior art. The Hayashi Declaration only compares a limited scope of the instant invention to subjects where no treatment of the skin was administered. This is not the closest prior art as evidenced

by the 103(a) obviousness rejection over Sunamoto et al. (English Translation of JP 03-292301) in view of Ishiwatari et al. (US Patent No. 6,074,652).

In view of the foregoing, when all of the evidence is considered, the totality of the rebuttal evidence of nonobviousness fails to outweigh the evidence of obviousness.

Regarding the establishment of unexpected results, a few notable principles are well settled. It is applicant's burden to explain any proffered data and establish how any results therein should be taken to be unexpected and significant. See MPEP 716.02 (b). The claims must be commensurate in scope with any evidence of unexpected results. See MPEP 716.02 (d). Further, a DECLARATION UNDER 37 CFR 1.132 must compare the claimed subject matter with the closest prior art in order to be effective to rebut a prima facie case of obviousness. See MPEP 716.02 (e). Applicants fail to provide clear and convincing evidence to support the alleged unexpected benefit.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yong S. Chong whose telephone number is (571)-272-8513. The examiner can normally be reached on M-F, 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, SREENI PADMANABHAN can be reached on (571)-272-0629. The fax phone number for the organization where this application or proceeding is assigned is (571)-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/YONG S. CHONG/
Primary Examiner, Art Unit 1617

YSC